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LETTERS

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- Ambient Temperature Reduction of NO to N₂ in Ru-Tailored Carbon Subnanospace
Yoko Nishi, Takaomi Suzuki, and Katsumi Kaneko^{*} 1938

ARTICLES

PHYSICAL CHEMISTRY OF MATERIALS: FROM NANOPARTICLES TO MACROMOLECULES

- Theoretical Study of CO and NO Vibrational Frequencies in Cu-Water Clusters and Implications for Cu-Exchanged Zeolites
R. Ramprasad, W. F. Schneider, K. C. Hass,^{*} and J. B. Adams 1940
- Spectromicroscopy of Poly(ethylene terephthalate): Comparison of Spectra and Radiation Damage Rates in X-ray Absorption and Electron Energy Loss
E. G. Rightor, A. P. Hitchcock,^{*} H. Ade, R. D. Leapman, S. G. Urquhart, A. P. Smith, G. Mitchell, D. Fischer, H. J. Shin, and T. Warwick 1950
- Studies on Model Electrorheological Fluids
James W. Goodwin,^{*} Gavin M. Markham, and Brian Vincent 1961
- Using the Optical Probe Methyl Orange To Determine the Role of Surfactant and Alcohol Chain Length in the Association of 1-Alkanols with Alkyltrimethylammonium Bromide Micelles
Kerry K. Karukstis,^{*} Noel D. D'Angelo, and Christine T. Loftus 1968
- Purification Procedure for Single-Walled Nanotubes
K. Tohji,^{*} H. Takahashi, Y. Shinoda, N. Shimizu, B. Jeyadevan, I. Matsuoka, Y. Saito, A. Kasuya, S. Ito, and Y. Nishina 1974
- Zeolite Chemistry of CuZSM-5 Revisited
M. Lo Jacono, C. Fierro, R. Dragone, Xiaobing Feng, Julie d'Itri, and W. Keith Hall^{*} 1979
- Adsorbate Interactions of Paramagnetic Palladium(I) Species in Pd(II)-Exchanged Na-MCM-22 Zeolite
A. M. Prakash, Tomasz Wasowicz, and Larry Kevan^{*} 1985

PHYSICAL CHEMISTRY OF SURFACES AND INTERFACES

- Adsorption of Water on NaCl (100) Surfaces: Role of Atomic Steps
Q. Dai, J. Hu, and M. Salmeron^{*} 1994
- Thermal Conversion of Chemisorbed Acetylene to Vinylidene and Hydrogenation to Ethylidyne on Rh(111): A Laser Induced Desorption Study
D. C. Papageorgopoulos, Q. Ge, S. Nimmo, and D. A. King^{*} 1999
- Two-Dimensional Pigment Monolayer Assemblies for Light-Harvesting Applications: Structural Characterization at the Air/Water Interface with X-ray Specular Reflectivity and on Solid Substrates by Optical Absorption Spectroscopy
Brian W. Gregory, David Vaknin,^{*} John D. Gray, Ben M. Ocko, Pieter Stroeve, Therese M. Cotton, and Walter S. Struve^{*} 2006
- Electron Spin Resonance and Diffuse Reflectance Ultraviolet-Visible Spectroscopies of Vanadium Immobilized at Surface Titanium Centers of Titanosilicate Mesoporous TiMCM-41 Molecular Sieves
Zhaohua Luan and Larry Kevan^{*} 2020
- Molecular Dynamics Model for Laser Ablation and Desorption of Organic Solids
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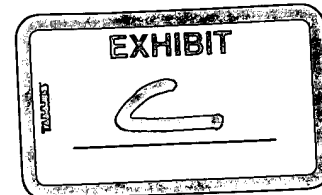
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>
> 5757760 INSPEC Abstract Number: A9801-6146-009
> Title: Purification and size-selection of carbon nanotubes
> Author(s): Bonard, J.-M.; Stora, T.; Salvétat, J.-P.; Maier, F.;
> Stoeckli, T.; Duschl, C.; Forro, L.; de Heer, W.A.; Chatelain, A.
> Author Affiliation: Inst. de Phys. Exp., Ecole Polytech. Federale de
> Lausanne, Switzerland
> Journal: Advanced Materials vol.9, no.10 p.827-31
> Publisher: VCH Verlagsgesellschaft,
> Publication Date: 8 Aug. 1997 Country of Publication: Germany
> CODEN: ADVMEW ISSN: 0935-9648
> SICI: 0935-9648(19970808)9:10L:827:PSSC;1-P
> Material Identity Number: M606-97013
> Language: English
> Abstract: A non-destructive method for purifying carbon nanotubes
> produced by arc discharge is described. The nanotubes, in the form of a
> kinetically stable colloidal dispersion in a water-surfactant solution, are
> separated from the nanoparticles by filtration. The Figure shows the
> purified nanotubes after two filtration steps. Through controlled
> flocculation, nanotube size selection is also possible.
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>
> 5735233 INSPEC Abstract Number: A9723-6146-033
> Title: EELS investigation of plasmon excitations in aluminum nanospheres
> and carbon nanotubes
> Author(s): Stoeckli, T.; Bonard, J.-M.; Stadelmann, P.-A.; Chatelain, A.
> Author Affiliation: Dept. de Phys., Ecole Polytech. Federale de Lausanne,
> Switzerland
> Journal: Zeitschrift fur Physik D (Atoms, Molecules and Clusters)
> Conference Title: Z. Phys. D, At. Mol. Clusters (Germany) vol.40, no.1-4
> p.425-8
> Publisher: Springer-Verlag,
> Publication Date: May 1997 Country of Publication: Germany
> CODEN: ZDACE2 ISSN: 0178-7683
> SICI: 0178-7683(199705)40:1/4L:425:EIPE;1-6
> Material Identity Number: J685-97009
> Conference Title: Eighth International Symposium on Small Particles and
> Inorganic Clusters
> Conference Sponsor: Augustinus Fonden; Carlsbergfondet; Danish Center for

- > Nanostructures; Danfysk; et al
- > Conference Date: 1-6 July 1996 Conference Location: Copenhagen,
- > Denmark
- > Language: English
- > Abstract: High resolution transmission electron microscopy and electron
- > energy loss spectroscopy are used to investigate plasmon losses of aluminum
- > nanospheres and carbon nanotubes with high spatial resolution. We observe
- > that some features of the spectra depend on the size of the particles. The
- > suitability of a dielectric theory model to interpret the spectra is tested
- > in the case of Al spheres. The model permits the identification of the
- > observed peaks and reproduces the size dependent features. A similar model
- > is applied to calculate excitation probabilities for carbon nanotubes.
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- >
- > 5735231 INSPEC Abstract Number: A9723-6146-031
- > Title: Carbon nanotubes films: electronic properties and their application
- > as field emitters
- > Author(s): de Heer, W.A.; Bonard, J.M.; Stoeckli, T.; Chatelain, A.;
- > Forro, L.; Ugarte, D.
- > Author Affiliation: Dept. de Phys., Ecole Polytech. Federale de Lausanne,
- > Switzerland
- > Journal: Zeitschrift fur Physik D (Atoms, Molecules and Clusters) >
- > Conference Title: Z. Phys. D, At. Mol. Clusters (Germany) vol.40, no.1-4
- > p.418-20
- > Publisher: Springer-Verlag,
- > Publication Date: May 1997 Country of Publication: Germany
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- > Material Identity Number: J685-97009
- > Conference Title: Eighth International Symposium on Small Particles and
- > Inorganic Clusters
- > Conference Sponsor: Augustinus Fonden; Carlsbergfondet; Danish Center for
- > Nanostructures; Danfysk; et al
- > Conference Date: 1-6 July 1996 Conference Location: Copenhagen,
- > Denmark
- > Language: English
- > Abstract: Aligned carbon nanotube films have been studied with a wide
- > variety of characterization techniques. Although nanotubes resemble bulk
- > graphite as far as carrier densities, susceptibilities and conductivities
- > are concerned, transport properties and ESR measurements indicate that
- > carrier localization occurs at low temperatures. Nanotube films are good
- > field emitters producing large currents at relatively low electric fields.
- > The performance is superior to the intensely studied CVD diamond films in
- > particular for the threshold field for electron emission. We believe that
- > the observed remarkable electron emission is related to the special

> electronic structure of the nanotube tips.
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> AUTHOR(S): De Heer, Walt A.; Bonard, Jean Marc; Fauth, Kai; Chatelain,
> Andre; Forro, Laszlo; Ugarte, Daniel
> LOCATION: School Physics, Georgia Institute Technology, Atlanta, GA,
> 30332, USA
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